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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/539,216

04/17/2006

Alessandro Coppola

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10/12/2007

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EXAMINER

WIEHE, NATHANIEL EDWARD

ART UNIT

PAPER NUMBER

3745

MAIL DATE

DELIVERY MODE

10/12/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/539,216	<b>Applicant(s)</b> COPPOLA ET AL.	
	<b>Examiner</b> Nathan Wiehe	<b>Art Unit</b> 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 August 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2 and 5-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f):
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments filed 20 August 2007 have been fully considered but they are not persuasive.

Applicant argues, "since *examination* is used to determine *patentability* of the application... "material to examination " is sufficient". While the office determines patentability through examination the burden of patentability for the applicant is broader than the examination process. Further, the rule explicitly requires the applicant to disclose information material to patentability, not just examination. Therefore, the objection to the oath is maintained.

Applicant argues that Gaudenzi does not disclose every limitation of the claims. Specifically, Applicant asserts that Gaudenzi does not disclose a dispersion of powders in a predefined manner on the component so as to expose metal surfaces in a designated zone of the component to the powder in suitable concentration, to allow fixing to the metal surfaces in the zone. However, Gaudenzi explicitly indicates that the powders are dispersed and that the concentration of the metal powder is greatest adjacent the root portion resulting in a welding of the powder portion to the metal root portion (Gaudenzi column 1, lines 42-48). Therefore, the dispersion of powders disclosed by Gaudenzi exposes the metal surfaces in a designated zone in suitable concentrations to allow fixing to the metal surfaces in the zone.

***Oath/Declaration***

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:  
It does not state that the person making the oath or declaration acknowledges the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 CFR 1.56.

Specifically, the statement "material to examination" is insufficient.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 6-8 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Gaudenzi (2,431,660). Gaudenzi discloses high performance component for a gas turbine and the method of obtaining the competent by powder metallurgy with a dispersion of powders. The powders are dispersed in a predefined manner resulting in a suitable concentrations in designated zones, i.e. the interface of the powders with the internal bodies, so as to allow fixing to the metal surfaces in the zones (Gaudenzi column 1, lines 42-48). Also, the method provides for maximum refractoriness and resistance with respect of the hot gases in a designated zone (b). The powders include metal (a) and non-metal (b) powders and are perfectly fixed together by microfusion (Gaudenzi column 1, lines 42-45). Further, the dispersion of metal and ceramic

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powders provides for varied chemical and physical properties at different points of the component.

In regard to claim 6, the limitation of "internal bodies are produced by microfusion or mechanical machining" is considered a product by process limitation. As set forth in MPEP 2114, product by process claims are NOT limited to the manipulation of the recited steps, only to the structure implied by the steps. Once a product appearing to be substantially the same or similar is found, a 25 U.S.C. § 102/103 rejection may be made and the burden is shifted to applicant to show an unobvious difference. See MPEP 2113. However, in the instant case Gaudenzi does disclose the method of obtaining the component as claimed.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2,5 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaudenzi (2,431,660). Gaudenzi disclose the method of manufacturing components of a gas turbine substantially as claimed except for the step of producing internal bodies by microfusion or mechanical machining. Gaudenzi is silent as to the method of forming the root section and states, "the foot or root portion a of the blade is formed of a suitable steel and shaped to conform to the design of the stator and rotor mountings of the turbine." (Gaudenzi column 1, lines 34-37). However,

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it is well known in the art of forming turbine components to structure steel mounting structures, i.e. blade roots, through the process of mechanical machining in order to conform to close tolerances of the mounting structures. Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Gaudenzi by forming the blade root through mechanical machining for the purpose of meeting the close tolerances of the turbine's mounting structures.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

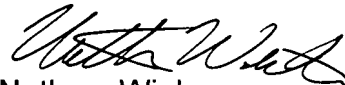
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Wiehe whose telephone number is (571)272-

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8648. The examiner can normally be reached on Mon.-Thur. and alternate Fri., 7am-4:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571)272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Nathan Wiehe  
Examiner  
Art Unit 3745



EDWARD K. LOOK  
SUPERVISORY PATENT EXAMINER  
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10/10/07